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EXAMINER	
BARQADLE, YASIN M	

ART UNIT	PAPER NUMBER
2153	

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/812,850	IWATA ET AL.	
	Examiner	Art Unit	
	Yasin M. Barqadle	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11/30/2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

1. Applicant's arguments filed on November 30, 2005 have been fully considered but they are not persuasive.

- Claims 1-20 are presented for examination.

Response to Arguments

2. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the claimed invention is directed to a viewer in which a full page of text is shown to a user at one time. Page 8, last paragraph) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues, "In Kobayashi, the transmission speed is too low to read the contents of a book on a page-by-page basis. For example, when the content of a document of a PDF file is to be transmitted at a transmission rate of 16 Mbps, if, as in Kobayashi, the content is not converted into an intermediate data file, it takes about one second to transmit the content of about 20 pages. However, in order for a human being to be able to browse the entire content without noticing the rewriting time, the displayed time must be shortened to within approximately 0.3 seconds. If the contents are not converted into intermediate data, the displayed pages will be difficult to read because a space is inserted between adjacent pages when the content is to be scrolled or when the content is to be read page-by-page." (Page 9, paragraphe one. Examiner notes that applicant's claims do not include a content of PDF document or a transmission rate of 16 Mbps. "Claim 1

requires a portable viewer division, that can be carried by the user carrying said portable server division, for displaying said book-type contents transmitted from said server division page by page" Nevertheless, Kobayashi discloses "A specific scene where the cellular phone 2 is used as the viewer of the PC 1 is, for example, a case where the user confirms schedule data registered in a scheduler (schedule managing function) in the PC 1 on the cellular phone 2 ... the user can access the PC 1 to start the scheduler from the cellular phone 2 via the wireless link, so that the data in the scheduler can be displayed on the screen of the cellular phone 2, thereby enabling the user to confirm the data." (Col. 11, lines 11-21). Kobayashi further disclose "the user can make message data on the word processing software installed in the PC 1 and send the messaged data to the cellular phone 2." Therefore, Kobayashi clearly discloses the capability of receiving and viewing page-by-page content (word document) wirelessly at the rate provided by (a wireless LAN or Bluetooth System).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-7, 12, 15-17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi U.S. Patent (6633759) in view of Kikinis (U.S. Patent Number 6,553,410, hereinafter "Kikinis").

In referring to claims 1,3, 4, and 5,

- A portable server division, that can be carried in a container by a user:

  Kobayashi, Fig. 9 shows a portable server division 1, which can be carried in a container (i.e. *"a briefcase") by* a user

  - The portable server division transmitting and receiving book-type contents having page-by-page information containing at least either images or characters:

    "The software referred to herein includes, in case of the PC 1, application software installed in the PC 1, ***such*** *as word processing software"* (Kobayashi, col. 4, lines 34-36)

  - A portable viewer division, that can be carried by the user carrying said **portable** server division, for displaying said book-type contents transmitted from said server division page by page: Kobayashi, Fig. 9 shows a portable viewer division 2

Although Kobayashi shows substantial features of the claimed invention including processing the data sent from the PC 1 to the cellular phone 2 by changing the character font or removing unnecessary data in accordance with the size of the screen of the cellular phone 2 (col. 11, lines 1-2). Kobayashi is silent as to how an image data is transferred from the server (notebook pc) to the client (cellular phone). Kobayashi does not explicitly show means of converting the data to be displayed into a new format. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Kobayashi as evidenced by Kikinis.

In analogous art, Kikinis discloses tailoring data and transmission protocol for efficient interactive data transactions over wide-area networks. A person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Kobayashi so as to run the proxy server software on the server, such as taught by Kikinis, in order to take advantage of the faster network capabilities of the notebook PC and format the data for display on a smaller screen while browsing the Internet.

In referring to claim 3, Kobayashi in view of Kikinis shows,

- Said means for converting converts a data file having at least one of a document layout, document information, character information and image information into the intermediate data file formed by part of information in an image wherein said means for transferring transfers the intermediate data file so converted to said viewer division:

  Kikinis, Fig. 4 shows converting an HTML file (from step 89) into a new layout as an HTL file (in step 99) and sending said HTL file over the wireless interface in step 105.

  • Said viewer division displays a page-by-page image by describing the intermediate data File: Kikinis, Fig. 4 shows displaying the page-by-page image in step 107.

In referring to claim 2,

The viewer division comprises,

- A display panel for displaying said book-type contents page by page and a display memory for storing page-by-page information that is to be displayed on said display panel:

  Kobayashi, Fig. 4 shows a display panel 43 on the viewer division

- A first wireless interface module:

  Kobayashi, Fig. 4 shows a first wireless interface module 30 on the viewer division

- A first battery for supplying power to said display panel and said display memory: Kobayashi, Fig. 9 shows the viewer division is a cell phone, which includes *"a battery checking function "* (Kobayashi, col. 3, lines 17-18)

The server division. comprises,

- A disk for storing said book-type contents; a computer processing unit for creating page-by-page information from said book-type contents stored in said disk:

  Kobayashi, Fig. 3 shows the application(s) 27 are stored in memory; Kobayashi, Fig. 2 shows a computer processing unit 17
- A second wireless interface module for performing wireless communications with said first wireless interface module of said viewer division:

  Kobayashi, Fig. 2 shows a second wireless interface module 7
- A second battery for supplying power to said disk, said second wireless interface module and said computer-processing unit:

  A portable computer that is able to operate while in a briefcase inherently implies a battery

Claim 6, Kobayashi in view of Kikinis shows,

- Said intermediate data file is constituted by a plurality of hierarchies, whereby said intermediate data file is sequentially transferred hierarchy by hierarchy in transferring images:

  "In various embodiments of the present invention, hand-held devices with CPUs having an ability to run at from 0.001 to 0.05 MIPs can serve as WEB browsers; displaying WEB pages and allowing users to initiate on-screen links ***and to input data into input fields.*** *"* (Kikinis, col. 8, lines 34-38)

  The intermediate data files allow the users to initiate on-screen links and are therefore constituted by a plurality of hierarchies
- Said viewer division describes said intermediate data file in said display memory every time said intermediate data is transferred thereto:

  Kikinis, Fig. 4 shows displaying the intermediate data file in step 107.

In referring to claim 7, Kobayashi in view of Kikinis shows,

- Said intermediate data file is configured by layering character information of original image information in accordance with the size of character font, so that priority in transfer is granted to intermediate data files in which larger-sized characters are layered: The system of Kikinis translates an HTML file to HTL inherently implying layering character information of original image information in accordance with the size of character font

In referring to claim 12 (as understood), Kobayashi in view of Kikinis shows,

- Said portable viewer division has a compressed data decompressing function, wherein a page image in which a page constitutes a unit is data compressed at said portable server division:

  "At step 101 the Proxy-Server converts all of the jpg files to a dithered bitmap format according to information associated with the user-ID received from the hand-held at log-on. This ID establishes the size and resolution of the hand-held's display, for example, and the bitmap created from the jpg files is scaled to the hand-held's display." (Kikinis, col. 11, lines 22-27)

- After transferring said compressed image, said transferred compressed image is expanded for display by said compressed data decompressing function at said viewer division. Kikinis, Fig. 4 shows displaying the compressed image at step 107.

In referring to claim 15, Kobayashi in view of Kikinis shows,

- Said viewer division has its own specific identification number, wherein said identification number is registered in advance in said server division:
  *"At step 61 **the user** logs on **by** entering a **user name** and password and **the** field unit identifies itself **with** its ID. At step **63 the** Proxy-Server compares **the entered password and** ID **with** stored records, **and** derives a **signature** for **the unit. At** step 65 **the** Proxy-Server decides **whether the information** is correct. "* (Kikinis, col. 10, lines 47-52)

- Said identification number is described in an intermediate data file, whereby when the identification number of an intermediate data file sent to said viewer division coincides with the identification number that said viewer division possesses, the data is described in said display memory:

  "If the Log-On is valid, control passes to step 67, and the Proxy-Server acknowledges the successful log-on to the hand-held unit at step 69. " (Kikinis, col. 10, lines 52-54)

In referring to claim 16 (as understood), Kobayashi in view of Kikinis shows,

- Said viewer division has its own specific identification number, wherein said identification number is registered in advance in said server division:

  Kikinis, col. 10, lines 47-52 (see full quote above)

- Said identification number is described in an intermediate data file, whereby when the identification number of an intermediate data file sent to said viewer division coincides with the identification number that said viewer division possesses, hierarchical data on a lower layer is described in said display memory:

  Kikinis, col. 10, lines 52-54 (see full quote above)

In referring to claim 17 (as understood), Kobayashi in view of Kikinis shows,

- A signal comprising the identification number of said viewer division is transmitted from said viewer division to said server division:

  Kikinis, col. 10, lines 47-52 (see full quote above)

- When said signal is received at said server division, said signal is collated with the identification number of a viewer registered therein and wherein when said collation determines that said identification numbers coincide with each other, a publication signal is described in an intermediate data file:

  "An ID match when connecting a hand-held unit to the Proxy-Server provides the Proxy-Server with information about the hand-held unit, such as CPU type and power, screen

size, type and resolution, presence of a pointer device, and ***sound capability.***" **(Kikinis,** col. 8, lines 15-19)
Kikinis, col. 10, lines 52-54 (see full quote above)

In referring to claim 19 (as understood), Kobayashi in view of Kikinis shows,

- A signal comprising the identification number of said viewer division is transmitted from said viewer division to said server division:
  Kikinis, col. 10, lines 47-52 (see full quote above)
- When said signal is received at said server division, said signal is collated with the identification number of a viewer registered therein and wherein when said collation determines that said identification numbers coincide with each other, a publication signal is described in an intermediate data file:
  Kikinis, col. 8, lines 15-19 (see full **quote above), *Kikinis,*** *col. 10, lines* **52-54** (see full quote above)

4. Claim 9 (as understood) is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Kikinis and in further view of Helfman (U.S. Patent Number 6,119,135, hereinafter "Helfman"). Although Kikinis in view of Nguyen shows substantial features of the claimed invention, Kobayashi in view of Kikinis does not explicitly show priority in transfer is given to intermediate data files on said hierarchies of image portions. Nonetheless this feature is well known in the art and would have been an obvious design choice for the system disclosed by Kobayashi in view of Kikinis as evidenced by Helfman.

In analogous art, Helfman discloses a method for passively browsing the Internet using images extracted from web pages. Helfman shows: *"The system maintains a mapping list that maps* ***the universal resource*** *locator (URL) of* ***the displayed web page*** *images to* ***the*** *URL of* ***the web page containing those*** *images.* ***When a user*** *selects a* ***displayed*** *image,* ***the user's***

browser is driven to the associated web page, so that the user can view the web page in its entirety." (Helfman, col. 1, lines 42-47)

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Kobayashi in view of Kikinis so as to transfer an image of a web page before the text, such as taught by Helfman, in order to preview a web page without fully downloading the pages data.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Kikinis and in further view of Kunkel et al. (U.S. Patent Number 6,477,579, hereinafter "Kunkel"). Although Kobayashi in view of Kikinis shows substantial features of the claimed invention, Kobayashi in view of Kikinis does not show the viewer writes in said display memory for each address which is a certain interval away from a transferred intermediate data file. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Kobayashi in view of Kikinis as evidenced by Kunkel.

In analogous art, Kunkel discloses an access system and method for providing interactive access to an information source through a networked distribution system. Kunkel shows storing HTML data from the hyperlinks in the current web page: "In the operation of the channel hyperlinking system 10, each of the headends 14 preferably pre-caches from the ISP 30, the HTML data pertaining to the channel hyperlinks associated with upcoming programming prior to the broadcasts, and stores this information in the cache 31. " (Kunkel, col. 12, lines 45-49)

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Kobayashi in view of Kikinis so as to pre-cache data that is an interval away from the intermediate data file, such as taught by Kunkel, in order to speed up the response to an activated link.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Kikinis and in further view of Marmor (U.S. Patent Number 6,601,108, hereinafter "Marmor"). Although Kobayashi in view of Kikinis shows substantial features of the claimed invention, including the system of claim 6 (see 103 rejection above), Kobayashi in view of Kikinis does not show said intermediate data file is configured by converting character information into a binary image. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Kobayashi in view of Kikinis as evidenced by Marmor.

In analogous art, Marmor discloses an automatic conversion system. Marmor shows said intermediate data file is configured by converting character information into a binary image: "In *a preferred embodiment of the invention, data from the server which cannot normally be displayed on the client is converted, by the automatic converter, into image files for display on the client. Preferably, text data for which there is no available font on the client is converted in image data, for example GIF format data.* "(Marmor, col. 5, lines 8-13)

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Kobayashi in view of Kikinis so as to convert character information into a binary image, such as taught by Marmor, in order to allow the client to display characters from an unsupported character set.

7. Claims 13, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Kikinis and in further view of Jungck (U.S. Patent Number 6,728,785, hereinafter "Jungck").

In referring to claim 13 (as understood), although Kobayashi in view of Kikinis shows substantial features of the claimed invention, including the system of claim 1 (see 102 rejection above), Kobayashi in view of Kikinis does not show said viewer division has a compressed data decompressing function, wherein an intermediate data file in which a page image, in which a page constitutes a unit, is layered is data compressed at said server division, wherein after said compressed intermediate data file has been transferred, said transferred compressed image is expanded by said compressed data decompressing function at said viewer division. Nonetheless

this feature is well known in the art and would have been an obvious modification to the system disclosed by Kobayashi in view of Kikinis as evidenced by Jungck.

In analogous art, Jungck discloses a system and method for dynamic compression of data. Jungck shows compressing data at the server division and decompressing the data at the viewer division: *"The present **invention** intercepts web page **requests** then compresses the web page, which is usually an HTML file, and sends it to the requesting workstation in the compressed format. The requesting workstation then decompresses the web page before processing the web page."* (Jungck, col. 3, line 67 – col. 4, line 5)

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Kobayashi in view of Kikinis so as to compress data at the server and decompress the data at the viewer, such as taught by Jungck, in order *"to reduce the time required to transfer files. "* (Jungck, col. 1, lines 18-19)

In referring to claim 18 (as understood), although Kobayashi in view of Kikinis shows substantial features of the claimed invention, including:

- The system of claim 12 (see rejection above),
  - Said viewer division has its own specific identification number, wherein said identification number is registered in advance in said portable server division: *Kikinis, col. 10, lines 47-52* (see full quote above)
  - Said identification number is described in an intermediate data file, whereby when the identification number of an intermediate data file sent to said viewer division coincides with the identification number that said viewer division holds a notification is displayed on the viewer division: Kikinis, *col. 10, lines 52-54* (see full quote above)

  However Kobayashi in view of Kikinis does not show a compressed file is decompressed when the identification number is determined to be valid. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Kobayashi in view of Kikinis as evidenced by Jungck.

  In analogous art, Jungck discloses a system and method for dynamic compression of data. Jungck shows compressing data at the server division and decompressing the data at the

viewer division: *Jungck, col. 3, line 67 – col. 4, line 5* (see full quote above)

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Kobayashi in view of Kikinis so as to compress data at the server and decompress the data at the viewer, such as taught by Jungck, in order *"to reduce the time required to transfer files."* (Jungck, col. 1, lines 18-19)

In referring to claim 20 (as understood), Kobayashi in view of Kikinis in view of Jungck shows,

- Said viewer division has its own specific identification number, wherein said identification number is registered in advance in said portable server division: *Kikinis, col. 10, lines 47-52* (see full quote above)
- Said identification number is described in an intermediate data file, whereby when the identification number of an intermediate data file sent to said viewer division coincides with the identification number that said **viewer division holds,** a **compressed** data is **decompressed:**

Kikinis, col. 10, lines 52-54 (see full quote above), a system that compresses data, sends it over a wireless interface and then decompresses said data inherently implies a compressed data is decompressed when information is sent from the server to the viewer.

8. Claim 14 (as understood) is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Kikinis and in further in view of Betts (U.S. Patent Number 4,734,920, hereinafter `Betts"). Although Kobayashi in view of Kikinis shows substantial features of the claimed invention, including the system of claim 3, Kobayashi in view of Kikinis does not show a plurality of said wireless interface modules. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Kobayashi in view of Kikinis as evidenced by Betts.

In analogous art, Betts discloses a high speed modem for multiple communication circuits. Betts, Fig. 1 shows a plurality of line interfaces on the client side (30, 34) and on the server side

(35, 36).

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Kobayashi in view of Kikinis so as to have a plurality of said wireless interface modules, such as taught by Betts, in order to provide a high speed connection using multiple slow communication connections.

Conclusion

9. **ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

The prior made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yasin Barqadle whose telephone number is 571-272-3947. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 571-272-3949. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Information regarding the status of an application may be obtained form the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or public PAIR system. Status information for unpublished applications is available through private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YB

Art Unit 2153

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